

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,802	06/05/2001	Brian T. Webb	9204-10	5921

7590 10/13/2004
WAGNER, MURABITO & HOA LLP
Two North Market Street
Third Floor
San Jose, CA 95113

EXAMINER

BAUM, RONALD

ART UNIT	PAPER NUMBER
----------	--------------

2136

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,802

Applicant(s)

WEBB ET AL.

Examiner

Ronald Baum

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

1. Claims 1-42 are pending for examination.
2. Claims 1-42 are rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Raanan et al, U.S. Patent 6,311,278 B1.

4. As per claim 1; "A method of accessing devices on a private network via a client on a public network, the method comprising the following steps performed by a gateway on the private network [ABSTRACT, figure 1-2 and accompanying descriptions]: receiving a request from the client to access a Web server of a device on the private network, wherein the web server has an address that is valid on the private network but is not valid on the public network [col. 1, lines 30-col. 10, line 18, whereas the use of a firewall/gateway network interface node clearly encompasses the aspect of the address translation between the 2 networks for the low level (i.e., physical layer NIC signature) addressing, such that the address spaces would be unique between the client (NIC) on the public network and the server (NIC) on the private network.]; redirecting the received client request to the Web server of the device on the private network [i.e., col. 2, lines 49-59, col. 3, lines 65-col. 5, line 9, col. 5, lines 29-60]; scrubbing a Web page served by

Art Unit: 2136

the Web server in response to the received client request, comprising replacing an address in the Web page that is not valid on the public network with an address that is valid on the public network [i.e., col. 2, lines 49-59, col. 3, lines 65-col. 5, line 9, col. 6, lines 1-28, col. 7, lines 45-col. 8, line 7]; and serving the scrubbed Web page to the client [i.e., col. 2, lines 49-59, col. 3, lines 65-col. 5, line 9]. ”;

Further, as per claim 15; “A gateway system [This claim is the system mean plus function claim for the method claim 1 above, and is rejected for the same reasons provided for the claim 1 rejection] that permits access to devices on a private network via a client on a public network, comprising: means for receiving a request from the client to access a Web server of a device on the private network, wherein the Web server has an address that is valid on the private network but is not valid on the public network; means for redirecting the received client to request to the Web server; means for scrubbing a Web page served by the Web server in response to the received client request, comprising means for replacing an address in the Web page that is not valid or the public network with an address that is valid on the public network; and means for serving the scrubbed Web page to the client.”;

Further, as per claim 29; “A computer program product [This claim is the embodied software claim for the method claim 1 above, and is rejected for the same reasons provided for the claim 1 rejection] that permits access to devices on a private network via a client on a public network, the computer program product comprising a computer usable storage medium having computer readable program code embodied in the medium, the computer readable program code comprising: computer readable program code that receives a request from the client to access a Web server of a device on the private network, wherein the Web server has an address that is

valid on the private network but is not valid on the public network; computer readable program code that redirects the received client request to the Web server; computer readable program code that scrubs a Web page served by the Web server in response to the received client request, comprising computer readable Program code that replaces an address in the Web page that is not valid on the public network with an address that is valid on the public network; and computer readable program code that serves the scrubbed Web page to the client.”.

5. Claim 2 *additionally recites* the limitation that; “The method according to Claim 1, further comprising the following steps performed by the gateway prior to receiving a request from the client to access a Web server of the device: ascertaining rights of a user to access one or more devices on the private network; and serving a Web page to the client that identifies each device on the private network for which the user has access rights, wherein the Web page includes to a link to a Web server of each device on the private network for which the user has access rights.”. The teachings of Raanan et al suggest such limitations (col. 1, lines 30-col. 10, line 18, whereas the use of a firewall/gateway to determine authorized and allowable actions by the client (i.e., col. 2, lines 39-col. 3, line 23, col. 4, lines 65-col. 5, line 29, 61-67, col. 7, lines 19-25), are broadly interpreted to encompass the “ascertaining rights of a user to access one or more devices on the private network” limitation, and the extraction/robot module translation of addressing (i.e., URL, IP level addressing) protocol information (i.e., col. 3, lines 53-col. 4, line 33, col. 5, lines 60-col. 6, line 59, col. 7, lines 5-8, col. 8, lines 64-col. 9, line 18) are broadly interpreted to encompass the “... includes to a link to a Web server of each device on the private network for which the user has access rights” limitation.);

Further, claim 16 *additionally recites* the limitation that; "The gateway system [This claim is the system mean plus function claim for the method claim 2 above, and is rejected for the same reasons provided for the claim 2 rejection] according to Claim 15, further comprising: means for ascertaining rights of a user to access one or more devices on the private network; and 5 means for serving a Web page to the client that identifies each device on the private network for which the user has access rights, wherein the Web page includes a link to a Web server of each device on the private network for which the user has access rights.";

Further, claim 30 *additionally recites* the limitation that; "The computer program product [This claim is the embodied software claim for the method claim 2 above, and is rejected for the same reasons provided for the claim 2 rejection] according to claim 29, further comprising: computer readable program code that ascertains rights of a user to access one or more devices on the private network; and computer readable program code that serves a Web page to the client that identifies each device on the private network for which the user has access rights, wherein the Web page includes a link to a Web server of each device on the private network for which the user has access rights.".

6. Claim 3 *additionally recites* the limitation that; "The method according to Claim 2, further comprising the step of accepting a user log-in request from the client prior to ascertaining rights of the user, wherein the user log-in request includes an identification of the user." The teachings of Raanan et al suggest such limitations (col. 1, lines 30-col. 10, line 18, whereas the use of a firewall/gateway to determine authorized and allowable actions by the client (i.e., col. 2, lines 39-col. 3, line 23, col. 4, lines 65-col. 5, line 29, 61-67, col. 7, lines 19-25), are broadly

interpreted to encompass the “accepting a user log-in request ... prior to ascertaining rights of the user, ... includes an identification of the user” limitation.);

Further, claim 17 *additionally recites* the limitation that; “The gateway system [This claim is the system mean plus function claim for the method claim 3 above, and is rejected for the same reasons provided for the claim 3 rejection] according to Claim 16, further comprising means for accepting, a user log-in request from the client, wherein the user log-in request includes an identification of the user.”;

Further, claim 31 *additionally recites* the limitation that; “The computer program product [This claim is the embodied software claim for the method claim 3 above, and is rejected for the same reasons provided for the claim 3 rejection] according to Claim 30, further comprising computer readable program code that accepts a user log-in request from the client, wherein the user log-in request includes an identification of the user.”.

7. Claim 4 *additionally recites* the limitation that; “The method according to Claim 2, wherein each link to a Web sever includes a uniform resource Locator (URL) for the gateway that is valid on the public network and an identification of a gateway port that is mapped to a respective Web server, and wherein each link is configured to send a request to a respective Web server via the gateway at an identified gateway port.”. The teachings of Raanan et. al suggest such limitations (col. 1, lines 30-col. 10, line 18, whereas the use of an extraction/robot module translation of addressing (i.e., URL, IP level addressing) protocol information (i.e., col. 3, lines 53-col. 4, line 33, col. 5, lines 60-col. 6, line 59, col. 7, lines 5-8, col. 8, lines 64-col. 9, line 18) are broadly interpreted to encompass the “... (URL) for the gateway ... valid on the public network

... identification ... port ... mapped to a respective Web server, ... link is ... to send a request to a ... Web server via the gateway at an identified gateway port” limitation, whereas the use of the Internet Web protocol data structures clearly encompasses port addressing (i.e., that’s how applications are delineated from each other from an Internet network element perspective).);

Further, claim 18 *additionally recites* the limitation that, “The gateway system [This claim is the system mean plus function claim for the method claim 4 above, and is rejected for the same reasons provided for the claim 4 rejection] according to Claim 16, wherein each link to a Web server includes a uniform resource locator (URL) for the gateway system that is valid on the public network and an identification of a gateway system port that is mapped to a respective Web server, and wherein each link is configured to send a request to a respective Web server via the gateway system at an identified gateway System port.”;

Further, claim 32 *additionally recites* the limitation that, “The computer program product [This claim is the embodied software claim for the method claim 4 above, and is rejected for the same reasons provided for the claim 4 rejection] according to Claim 30, wherein each link to a Web server includes a uniform resource locator (URL) for a gateway on the private network that is valid on the public network and an identification of a gateway port that is mapped to a respective Web server, and wherein each link is configured to send a request to a respective Web server via the gateway at an identified gateway port.”.

8. Claim 5 *additionally recites* the limitation that, “The method according to Claim 1, wherein the scrubbing step comprises replacing an address in the Web page that is valid only on the private network with a URL for the gateway that is valid on the public network and an

identification of a gateway port that is mapped to the replaced address.” The teachings of Raanan et al suggest such limitations (col. 1, lines 30-col. 10, line 18, whereas the use of an extraction/robot module translation of addressing (i.e., URL, IP level addressing) protocol information (i.e., col. 3, lines 53-col. 4, line 33, col. 5, lines 60-col. 6, line 59, col. 7, lines 5-8, col. 8, lines 64-col. 9, line 18) are broadly interpreted to encompass the “replacing an address ... Web page ... valid ... with a URL for the gateway ... valid ... and an identification of a ... port that is mapped to the replaced address.” limitation, whereas the use of the Internet Web protocol data structures clearly encompasses port addressing (i.e., that’s how applications are delineated from each other from an Internet network element perspective).);

Further, claim 19 *additionally recites* the limitation that; “The gateway system [This claim is the system mean plus function claim for the method claim 5 above, and is rejected for the same reasons provided for the claim 5 rejection] according to Claim 15, wherein the means for scrubbing a Web page comprises means for replacing an address in the Web page that is valid only on the private network with a URL for the gateway system that is valid on the public network and an identification of a gateway system port that is mapped to the replaced address.”;

Further, claim 33 *additionally recites* the limitation that; “The computer program product [This claim is the embodied software claim for the method claim 5 above, and is rejected for the same reasons provided for the claim 5 rejection] according to Claim 29, wherein the computer readable program code that scrubs a Web page comprises computer readable program code that replaces an address in the Web page that is valid only on the private network with a URL for a gateway on the private network that is valid on the public network and an identification of a gateway port that is mapped to the replaced address.”.

9. Claim 6 *additionally recites* the limitation that; “The method according to Claim 2, wherein the step of serving a Web page to the client comprises: scanning a range of private network addresses to identify Web servers listening on one or more selected ports; mapping each identified Web server to a respective gateway port; and creating a Web page that contains a respective link to each gateway port for each device for which the to user has access rights.”. The teachings of Raanan et al suggest such limitations (col. 1, lines 30-col. 10, line 18, whereas the use of a firewall/gateway to determine authorized and allowable actions by the client (i.e., col. 2, lines 39-col. 3, line 23, col. 4, lines 65-col. 5, line 29, 61-67, col. 7, lines 19-25), are broadly interpreted to encompass the “mapping ... to a respective gateway port; ... creating a Web page ... link to each gateway port ... device for which the to user has access rights” limitation, and the extraction/robot module translation of addressing (i.e., URL, IP level addressing) protocol information (i.e., col. 3, lines 53-col. 4, line 33, col. 5, lines 60-col. 6, line 59, col. 7, lines 5-8, col. 8, lines 64-col. 9, line 18) are broadly interpreted to encompass the “scanning a range of private network addresses to identify Web servers listening on one or more selected ports” limitation.);

Further, claim 20 *additionally recites* the limitation that; “The gateway system [This claim is the system mean plus function claim for the method claim 6 above, and is rejected for the same reasons provided for the claim 6 rejection] according to Claim 16, wherein the means for serving a Web page to the client comprises: means for scanning a range of private network addresses to identify Web servers listening on one or more selected ports; means for mapping each identified Web server to a respective gateway system port; and means for creating a Web

Art Unit: 2136

pace that contains a to respective link to each gateway system port for each device for which the user has access rights.”;

Further, claim 34 *additionally recites* the limitation that, “The computer program product [This claim is the embodied software claim for the method claim 6 above, and is rejected for the same reasons provided for the claim 6 rejection] according to Claim 30, wherein the computer readable program code that serves a Web page to the client comprises: computer readable program code that scans a range of private network addresses to identify Web servers listening on one or more selected ports; computer readable program code that maps each identified Web server to a respective port of a gateway on the private network; and to computer readable program code that creates a Web page that contains a respective link to each gateway port for each device for which the user has access rights.”.

10. As per claim 7; “A method of accessing devices on a private network via a client on a public network, wherein each device includes a Web server having an address that is valid on the private network, but is not valid on the public network, the method comprising the following steps performed by a gateway on the private network: ascertaining rights of a user to access one or more devices on the private network; serving a Web page to the client that identifies each device on the private network for which the user has access rights, wherein the Web page includes a link to a Web server of each device on the private network for which the user has access rights; receiving a request from the client to access a Web server of a device on the private network in response to user activation of a link on the Web page; redirecting the received client request to the Web server; scrubbing a Web page served by the Web server in response to

Art Unit: 2136

the received client request, comprising removing links to Web servers of devices for which the user does not have access rights; and serving the scrubbed Web page to the client [This claim is the combination of claims 1,2 above, and is rejected for the same reasons provided for the claims 1,2 rejection].”;

Further, as per claim 21; “A gateway system [This claim is the system mean plus function claim for the method claim 7 above, and is rejected for the same reasons provided for the claim 7 rejection] that permits access to devices on a private network via a client on a public network, wherein each device includes a Web server having an address that is valid on the private network, but is not valid on the public network, wherein the gateway system comprises: means for ascertaining rights of a user to access one or more devices on the private network; means for serving a Web page to the client that identifies each device or the private network for which the user has access rights, wherein the Web page includes a link to a Web server of: each device on the private network for which the user has access rights; means for receiving a request from the client to access a Web server of a device on the private network in response to user activation of a link on the Web page; means for redirecting the received client request to the Web server; means for scrubbing a Web page served by the Web server in response to the received client request, comprising means for removing links to Web servers of devices for which the user does not have access rights; and means for serving the scrubbed Web page to the client”;

Further, as per claim 35; “A computer program product [This claim is the embodied software claim for the method claim 7 above, and is rejected for the same reasons provided for the claim 7 rejection] that permits access to devices on a private network via a client on a public network, wherein each device includes a Web server having an address that is valid on the

private network, but is not valid on the public network, the computer program product comprising a computer usable storage medium having computer readable program code embodied in the medium, the computer readable program code comprising: to computer readable program code that ascertains rights of a user to access one or more devices on the private network; computer readable program code that serves a Web page to the client that identifies each device on the private network for which the user has access rights, wherein the Web page includes a link to a Web server of each device on the private network for which the user has access rights; computer readable program code that receives a request from the client to access a Web server of a device on the private network in response to user activation of a link on the Web page; computer readable program code that redirects the received client request to the Web server; computer readable program code that scrubs a Web page served by the Web server in response to the received client request, comprising computer readable program code that removes links to Web servers of devices for which the user does not have access rights; and computer readable program code that serves the scrubbed Web page to the client.”.

11. Claim 8 *additionally recites* the limitation that; “The method according to Claim 7, further comprising the step of accepting a user log-in request from the client prior to ascertaining rights of the user, wherein the user log-in request includes an identification of the user.”. The teachings of Raanan et al suggest such limitations (col. 1, lines 30-col. 10, line 18, whereas the use of a firewall/gateway to determine authorized and allowable actions by the client (i.e., col. 2, lines 39-col. 3, line 23, col. 4, lines 65-col. 5, line 29, 61-67, col. 7, lines 19-25), are broadly

Art Unit: 2136

interpreted to encompass the “accepting a user log-in request ... prior to ascertaining rights of the user, ... includes an identification of the user” limitation.);

Further, claim 22 *additionally recites* the limitation that; “The gateway system [This claim is the system mean plus function claim for the method claim 8 above, and is rejected for the same reasons provided for the claim 8 rejection] according to Claim 21, further comprising means for accepting a user log-in request from the client; wherein the user log-in request includes an identification of the user.”;

Further, claim 36 *additionally recites* the limitation that; “The computer program product [This claim is the embodied software claim for the method claim 8 above, and is rejected for the same reasons provided for the claim 8 rejection] according to Claim 35, further comprising computer readable program code that accepts a user log-in request from the client, wherein the user log-in request includes an identification of the user.”.

12. Claim 9 *additionally recites* the limitation that; “The method according to Claim 7, wherein the scrubbing step further comprises replacing an address in the Web page that is not valid on the public network with an address that is valid on the public network.”. The teachings of Raanan et al suggest such limitations (col. 1, lines 30-col. 10, line 18, whereas the use of an extraction/robot module translation of addressing (i.e., URL, IP level addressing) protocol information (i.e., col. 3, lines 53-col. 4, line 33, col. 5, lines 60-col. 6, line 59, col. 7, lines 5-8, col. 8, lines 64-col. 9, line 18) are broadly interpreted to encompass the “replacing an address ... Web page ... valid ... with an address ... valid ...” limitation.);

Further, claim 23 *additionally recites* the limitation that; “The gateway system [This claim is the system mean plus function claim for the method claim 9 above, and is rejected for the same reasons provided for the claim 9 rejection] according to Claim 21, wherein the means for scrubbing a Web page further comprises means for replacing an address in the Web page that is not valid on the public network with an address that is valid on the public network.”;

Further, claim 37 *additionally recites* the limitation that; “The computer program product [This claim is the embodied software claim for the method claim 9 above, and is rejected for the same reasons provided for the claim 9 rejection] according to claim 35, wherein the computer readable program code that scrubs a Web page further comprises computer readable program code that replaces an address in the Web page that is not valid on the public network with an address that is valid on the public network.”.

13. Claim 10 *additionally recites* the limitation that; “The method according to Claim 7, wherein each link to a Web server includes a uniform resource locator (URL) for the gateway that is valid on the public network and an identification of a gateway port that is mapped to a respective Web server, and wherein each link is configured to send a request to a respective Web server via the gateway at an identified gateway port.”. The teachings of Raanan et al suggest such limitations (col. 1, lines 30-col. 10, line 18, whereas the use of an extraction/robot module translation of addressing (i.e., URL, IP level addressing) protocol information (i.e., col. 3, lines 53-col. 4, line 33, col. 5, lines 60-col. 6, line 59, col. 7, lines 5-8, col. 8, lines 64-col. 9, line 18) are broadly interpreted to encompass the “... (URL) for the gateway ... valid on the public network ... identification ... port ... mapped to a respective Web server, ... link is ... to send a request to

a ... Web server via the gateway at an identified gateway port” limitation, whereas the use of the Internet Web protocol data structures clearly encompasses port addressing (i.e., that’s how applications are delineated from each other from an Internet network element perspective).);

Further, claim 24 *additionally recites* the limitation that; “The gateway system [This claim is the system mean plus function claim for the method claim 10 above, and is rejected for the same reasons provided for the claim 10 rejection] according to Claim 21, wherein each link to a Web server includes a uniform resource locator (URL) for the gateway system that is valid on the public network and an identification of a gateway system port that is mapped to a respective Web server, and wherein each link is configured to send a request to a respective Web server via the gateway system at an identified gateway system port.”;

Further, claim 38 *additionally recites* the limitation that; “The computer program product [This claim is the embodied software claim for the method claim 10 above, and is rejected for the same reasons provided for the claim 10 rejection] according to Claim 35, wherein each link to a Web server includes a uniform resource locator (URL) for a gateway on the private network that is valid on to a public network and an identification of a gateway port that is mapped to a respective Web server, and wherein each link is configured to send a request to a respective Web server via the gateway at an identified gateway port.”.

14. Claim 11 *additionally recites* the limitation that; “The method according to Claim 7, wherein the step of serving a Web page to the client comprises: scanning a range of private network addresses to identify Web servers listening on one or more selected ports; mapping each identified Web server to a respective gateway port; and creating a Web page that contains a

Art Unit: 2136

respective link to each gateway port for each device for which the to user has access rights.” The teachings of Raanan et al suggest such limitations (col. 1, lines 30–col. 10, line 18, whereas the use of a firewall/gateway to determine authorized and allowable actions by the client (i.e., col. 2, lines 39–col. 3, line 23, col. 4, lines 65–col. 5, line 29, 61–67, col. 7, lines 19–25), are broadly interpreted to encompass the “mapping ... to a respective gateway port; ... creating a Web page ... link to each gateway port ... device for which the to user has access rights” limitation, and the extraction/robot module translation of addressing (i.e., URL, IP level addressing) protocol information (i.e., col. 3, lines 53–col. 4, line 33, col. 5, lines 60–col. 6, line 59, col. 7, lines 5–8, col. 8, lines 64–col. 9, line 18) are broadly interpreted to encompass the “scanning a range of private network addresses to identify Web servers listening on one or more selected ports” limitation.);

Further, claim 25 *additionally recites* the limitation that; “The gateway system [This claim is the system mean plus function claim for the method claim 11 above, and is rejected for the same reasons provided for the claim 11 rejection] according to Claim 21, wherein the means for serving a Web page to the client comprises: means for scanning a range of private network addresses to identify Web servers listening on one or more selected ports; means for mapping each identified Web server to a respective gateway system port; and means for creating a Web page that contains a respective link to each gateway system port for each device for which the user has access rights.”;

Further, claim 39 *additionally recites* the limitation that; “The computer program product [This claim is the embodied software claim for the method claim 11 above, and is rejected for the same reasons provided for the claim 11 rejection] according to Claim 35 wherein the computer readable program code that serves a Web page to the client comprises: computer readable

program code that scans a range of private network addresses to identify Web servers listening on one or more selected ports; computer readable program code that maps each identified Web server to a respective port of a gateway on the private network; and computer readable program code that creates a Web page that contains a respective link to each gateway port for each device for which the user has access rights.”

15. As per claim 12; “A method of accessing devices on a private network via a client on a public network, wherein each device includes a Web server having an address that is valid on the private network, but is not valid on the public network, the method comprising the following steps performed by a gateway on the private network: ascertaining rights of a user to access one or more devices on the private network; serving a Web page to the client that identifies each device on the private network for which the user has access rights, wherein the Web page includes a link to a Web server of each device on the private network for which the user has access rights, wherein each link to a Web server includes a uniform resource locator (URL) for the gateway that is valid on the public network and an identification of a gateway port that is mapped to a respective Web server, and wherein each link is configured to send a request to a respective Web server via the gateway at an identified gateway port; receiving a request from the client to access a Web server of a device on the private network in response to user activation of a link on the Web page; redirecting the received client request to the Web server; scrubbing a Web page served by the Web server in response to the received client request, comprising: removing links to Web servers of devices for which the user does not have access rights; and replacing an address in the Web page that is not valid on the public network with an address that

Art Unit: 2136

is valid on the public network; and serving the scrubbed Web page to the client [This claim is the combination of claims 1,2,4 above, and is rejected for the same reasons provided for the claims 1,2,4 rejection].”;

Further, as per claim 26, “A gateway system [This claim is the system mean plus function claim for the method claim 12 above, and is rejected for the same reasons provided for the claim 12 rejection] that permits access to devices on a private network via a client on a public network, wherein each device includes a Web server having an address that is valid on the private network, but is not valid on the public network, wherein the gateway system comprises: means for ascertaining rights of a user to access one or more devices on the private network; means for serving a Web page to the client that identifies each device on the private network for which the user has access rights, wherein the Web page includes a link to a Web server of each device on the private network for which the user has access rights, wherein each link to a Web server includes a uniform resource locator (URL) for the gateway system that is valid on the public network and an identification of a gateway system port that is mapped to a respective Web server, and wherein each link is configured to send a request to a respective Web server via the gateway system at an identified gateway system port; means for receiving a request from the client to access a Web server of a device on the private network in response to user activation of a link on the Web page; means for redirecting the received client request to the Web server; means for scrubbing a Web page served by the Web server in response to the received client request, comprising: means for removing links to Web servers of devices for which the user does not have access rights; and means for replacing an address in the Web space that is not valid on

Art Unit: 2136

the public network with an address that is valid on the public network; and means for serving the scrubbed Web page to the client.”;

Further, as per claim 40; “A computer program product [This claim is the embodied software claim for the method claim 12 above, and is rejected for the same reasons provided for the claim 12 rejection] that permits access to devices on a private network via a client on a public network, wherein each device includes a Web server having an address that is valid on the private network, but is not valid on the public network, the computer program product comprising a computer usable storage medium having computer readable program code embodied in the medium, the computer readable program code comprising: computer readable program code that ascertains rights of a user to access one or more devices on the private network; computer readable program code that serves a Web page to the client that identifies each device on the private network for which the user has access rights, wherein the Web page includes a link to a Web server of each device on the private network for which the user has access rights, wherein each link to a Web server includes a uniform resource locator (URL) for a gateway on the private network that is valid on the public network and an identification of a gateway port that is mapped to a respective Web server, and wherein each link is configured to send a request to a respective Web server via the gateway system at an identified gateway port; computer readable program code that receives a request from the client to access a Web server of a device on the private network in response to user activation of a link on the Web page; computer readable program code that redirects to received client request to the Web server; computer readable program code that scrubs a Web page served by the Web server in response to the received client request, comprising: computer readable program code that removes links to

Art Unit: 2136

Web servers of devices for which the user does not have access rights; and computer readable program code that replaces an address in the Web page that is not valid on the public network with an address that is valid on the public network; and computer readable program code that serves the scrubbed Web page to the client. ”.

16. Claim 13 *additionally recites* the limitation that; “The method according to Claim 12, further comprising the step of accepting a user log-in request from the client prior to ascertaining rights of the user, wherein the user log-in request includes an identification of the user.”. The teachings of Raanan et al suggest such limitations (col. 1, lines 30-col. 10, line 18, whereas the use of a firewall/gateway to determine authorized and allowable actions by the client (i.e., col. 2, lines 39-col. 3, line 23, col. 4, lines 65-col. 5, line 29, 61-67, col. 7, lines 19-25), are broadly interpreted to encompass the “accepting a user log-in request ... prior to ascertaining rights of the user, ... includes an identification of the user” limitation.);

Further, claim 27 *additionally recites* the limitation that; “The gateway system [This claim is the system mean plus function claim for the method claim 13 above, and is rejected for the same reasons provided for the claim 13 rejection] according to Claim 26, further comprising means for accepting a user log-in request from the client prior to ascertaining rights of the user, wherein the user log-in request includes an identification of the user.”;

Further, claim 41 *additionally recites* the limitation that; “The computer program product [This claim is the embodied software claim for the method claim 13 above, and is rejected for the same reasons provided for the claim 13 rejection] according to Claim 40, further comprising computer readable program code that accepts a user log-in request from the client prior to

ascertaining rights of the user, wherein the user log-in request includes an identification of the user.”.

17. Claim 14 *additionally recites* the limitation that; “The method according to Claim 12, wherein the step of serving a Web page to the client comprises: scanning a range of private network addresses to identify Web servers listening on one or more selected ports; mapping each identified Web server to a respective gateway port; and creating a Web page that contains a respective link to each gateway port for each device for which the to user has access rights.”. The teachings of Raanan et.al suggest such limitations (col. 1, lines 30-col. 10, line 18, whereas the use of a firewall/gateway to determine authorized and allowable actions by the client (i.e., col. 2, lines 39-col. 3, line 23, col. 4, lines 65-col. 5, line 29, 61-67, col. 7, lines 19-25), are broadly interpreted to encompass the “mapping ... to a respective gateway port; ... creating a Web page ... link to each gateway port ... device for which the to user has access rights” limitation, and the extraction/robot module translation of addressing (i.e., URL, IP level addressing) protocol information (i.e., col. 3, lines 53-col. 4, line 33, col. 5, lines 60-col. 6, line 59, col. 7, lines 5-8, col. 8, lines 64-col. 9, line 18) are broadly interpreted to encompass the “scanning a range of private network addresses to identify Web servers listening on one or more selected ports” limitation.);

Further, claim 28 *additionally recites* the limitation that; “The gateway system [This claim is the system mean plus function claim for the method claim 14 above, and is rejected for the same reasons provided for the claim 14 rejection] according to Claim 26, wherein the means for serving a Web page to the client comprises: means for scanning a range of private network addresses to identify Web servers listening on one or more selected ports; means for mapping

Art Unit: 2136

each identified Web server to a respective gateway system port; and means for creating a Web page that contains a respective link to each gateway system port for each device for which the user has access rights.”;

Further, claim 42 *additionally recites* the limitation that; “The computer program product [This claim is the embodied software claim for the method claim 14 above, and is rejected for the same reasons provided for the claim 14 rejection] according to Claim 40, wherein the computer readable program code that serves a Web page to the client comprises: computer readable program code that scans a range of private network addresses to identify Web servers listening on one or more selected ports; computer readable program code that maps each identified Web server to a respective gateway port; and computer readable program code that creates a Web page that contains a respective link to each gateway port for each device for which the user has access rights.”.

Conclusion

18. Any inquiry concerning this communication or earlier communications from examiner should be directed to Ronald Baum, whose telephone number is (703) 305-4276. The examiner can normally be reached Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh, can be reached at (703) 305-9648. The Fax number for the organization where this application is assigned is 703-872-9306.

Ronald Baum

Art Unit: 2136

Patent Examiner


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100